



Universal Impact
Factor 0.9285:2012;

1.2210:2013

Index Copernicus

ICV 2011: 5.09

ICV 2012: 6.42

ICV 2013: 15.8

ICV 2014: 89.16

NAAS Rating

2012 : 1.3;

2013-2014-2015:2.69

SJIF 2012: 3.947,

2013: 4.802

INFOBASE INDEX

2015:4.56

COSMOS IMPACT

FACTOR

2015: 4.366

Received on:

14th September 2016

Revised on:

26th September 2016

Accepted on:

10th October 2016

Published on:

1st November 2016

Volume No.

Online & Print

81 (2016)

Page No.

11 to 30

Life Sciences Leaflets is an international open access print & e journal, peer reviewed, worldwide abstract listed, published every month with ISSN, RNI Free- membership, downloads and access.

STUDY OF ETHNOMEDICINAL PLANTS AND ITS DOCUMENTATION OF WAGHAI FOREST, GUJARAT

FULESH K. KOKNI¹, HITESH A. SOLANKI² AND

DILIP D. PATEL³

¹RESEARCH SCHOLARS,

DEPARTMENT OF BOTANY, USS, GUJARAT UNIVERSITY,
AHMEDABAD, GUJARAT, INDIA.

²PROFESSOR, DEPARTMENT OF BOTANY, USS, GUJARAT
UNIVERSITY, AHMEDABAD, GUJARAT, INDIA.

³B. K. M. SCIENCE COLLEGE, VALSAD, GUJARAT, INDIA.

Corresponding author's e-mail: husolanki@yahoo.com and
koknifulesh02@gmail.com

ABSTRACT:

The present study deals with the documentation of ethnomedicinal plants belonging to Waghai Forest, Dangs District, Gujarat, India. The purpose of study was to collect indigenous traditional knowledge about medicinal plants by interviews of different age groups between 40 to 70 years. During the study 10 traditional healers belonging to 10 different villages of waghai taluka were regularly interviewed. In the study 120 ethnomedicinal plants documented which are used for curing various disease.

KEY WORD: *Ethnomedicine, traditional healers, medicinal uses, Waghai forest.*

INTRODUCTION:

Ethnobotany is an interdisciplinary field exploring the relationship between plants and people (Birhana *et al*, 2015). It combines 'ethnology' - the study of culture and 'botany' - the study of plants. (Harshberger, 1895) coined the term "Ethnobotany" to indicate plants used by ancient people. According to him ethnobotany mainly states that "the study of the utilitarian relationship between human beings and vegetation in their environment, including

medicinal uses”. He also said that the term Ethnobotany comes from the Greek word ‘ethnos’, which means ‘People’ and ‘botane’ which means ‘herb’. These can be literally translated as the study of people and herbs, which usually is generalized as ‘the study of people and plants’. (Jain, 2002)

In most of the tribal villages, they are usually one/ two local practitioners of traditional medicine, locally known as ‘Bhagats’ (Joshi *et al*, 2013) These practitioners have acquired the knowledge (mostly oral or non-codified) for treating patients, mostly from the elders of the family.

The “Father of Ethnobotany” Richard Evans Schultes explained that the discipline in this way “Ethnobotany simply means, investigating plants used by primitive societies in various parts of the world. He also said that Ethnobotanists aim to document, describe and explain complex relationships between cultures and uses of plants, focusing primarily on how plants are used, managed and perceived across human societies. This includes use for food, clothing, currency, ritual, medicine, dye, construction, cosmetics and a lot more. (Berlin, 1973) has reported that in the first half of the 20th century, Ethnobotany was merely a descriptive endeavor and Ethnobotanists were compiled long lists of plant species and description of their uses. (Tapsell *et al*, 2004) said that Medicinal plants have been identified and used throughout human history. Plants have the ability to synthesize a wide variety of chemical compounds that are used to perform important biological functions, and to defend against attack from predators such as insects, fungi and herbivorous mammals.

Many research work related to ethnobotany has been carried out in Gujarat like (Santapau, 1954) made a contribution to the Ethnobotany. (Joshi,1980) reported some plants medicinal value of the state and (D’Cruz, 2002) studied the Phytochemical and Biochemical Studies of some Ethnomedicinal Plants of Dediapada Forests, Gujarat, India. (Navoroja and Kanchana, 2012) Observations of medicinal plants used by kukna tribes of jhavada villages of Waghai forest, Dangs DT, Gujarat, India. (Nirmal *et al*, 2002) studied Preliminary investigations of plant diversity of Khatana and Waghai forests of North Western Ghats, South Gujarat, India.

The present studies deals with the study of medicinal plants used for the treatment of different illness by the tribals belonging to the Waghai forest.

Due to deforestation and extreme pressure on forest and due to other anthropogenic activities, the Waghai Forest is depleting day by day. There are other Allopathic and advance medicinal facilities that people can access today. There is an urgent need to explore an awareness among the local people

about the importance of medicinal plants. Moreover, conservation of medicinal plants could be done so that it can be protected in large scale.

MATERIAL AND METHODS:

Study Area:

The study has been done among the people living in the forest area of Waghai taluka situated in the Dang's District, Gujarat, India. Waghai forest is bordering Maharashtra state and is covered with high hills and rich forests. It is being administered by the Dangs forest division under wide notification of the Gujarat State Forest Department (Nirmal *et al*, 2004). Geographically Waghai Taluka is situated between 20° 30' N Latitudes and 73° 15' E Longitudes at about 450-700 meters above the sea level. The Waghai Taluka is bounded on the North by Vyara and Songadh Taluka of Surat district of Gujarat and Subir Taluka of Dangs district of Gujarat, on the east by saki Taluka of Navsari District of Maharashtra and on the West by Vansda Taluka of Navsari district and Vyara of Surat district of Gujarat State.



Field survey and collection of data:

The Waghai forest was visited twice a month. The field work was carried out from July 2015- June 2016. Ten respondents belonging to ten different villages of Waghai taluka were interviewed regularly. Relevant information collected through personal interviews has been noted down in the field diary. During the field work photographs of the plant along with their habits, leaves and floral parts were taken (if available). Field notes were taken so as to have information on the plants name, habit, habitat and the characteristics of the species along with the plant family. Pictures/Photos of plants were captured with SLR camera.

Ethno botanical information on the plants was obtained from the respondents out of the total selected. These constituted the traditional medicinal practitioners, herb sellers and herbalists. The use of semi structural questionnaire and oral interviews were adopted to obtain relevant ethno medicinal data. The questionnaires were administered to the respondents. The questionnaire is as follows.

1. Name and Village of the Bhagat.
2. Age of the respondent
3. Years of practice and Experience
4. The local name of the medicinal plants.
5. The diseases for which the plants are used.
6. Which part of the plant is used?
7. From where and how was the plant collected.
8. Preparation of ethno medicine.

The plants indicated by 10 respondents have been taken into account for the final analysis. The Reported use Value (per plant part) RU plant part and the number of uses for each plant part (e.g. Bark, root, leaves, flower, and fruit) Have been calculated.

RESULTS AND DISCUSSION:

The present work deals with the study of 120 Ethnomedicinal plants belonging to 53 families shown in Table No. 1. The most utilized plant families were Leguminosae (16 species), followed by Lamiaceae and Apocynaceae (9 species), Acanthaceae, Euphorbiaceae, Malvaceae, Compositae, Fabaceae, Solanaceae, Anacardiaceae, Asteraceae etc.

All plant species collected during the survey period were used to heal several diseases. The common sickness in the study areas included Dermatological disorders (wound, swelling, cuts and skin diseases) due to the extreme agricultural field works, Gastrointestinal disorders (deworming, stomach ache and constipation), skeletal, muscular pain & inflammation (headache, arthritis, backache and joint pains), poisonous animal bites (snake bite, Scorpion bite). Cough and diarrhoea were the major diseases found followed by Kidney stone, Jaundice, Body pain, Headache, Asthma, Constipation, Gastric problems etc.

Study reveals that the Reported Use Value (per plant part) RU plant part, the number of uses of each plant part (e.g. Bark, root, leaves, flower, fruit, seeds, stem, and whole plant). There were: 30 species (leaves), 22 (bark), 21 (roots), 4 (seeds), 15 (fruit), 1 (sap), 5 (flowers), 12 (whole plant), 1 (Pods), 1 (latex), 1 (Petiole), 2 (Tuber), 3 (bulb) and 2 (dry stick).

CONCLUSION:

The People of Waghai forest have a close relationship with nature as they are fully dependent on forest for food, Shelter, fodder and medicinal plants for their health care. Local people especially old age traditional healers heavily use these traditionally available medicinal plants for health. These are because plants are easily available, they are less expensive as compared to the other medicine. The work indicated that, the area receives plenty of medicinal plants to treat a broad spectrum of human illness. Many plants have medicinal importance, but there is a need to explore their important properties and develop awareness among the local community who are unaware of the importance of these plants. Thus, it is very important to document and preserve this wealth of knowledge for future generations.

Among all the ten bhagats Mangubhai was found to be the highest knowledge holder regarding the traditionally used plants and he had experience of about more than 45 years.

REFERENCES:

- Berlin (1973) General principles of classification and nomenclature in folk biology. *American anthropologist*. Vol.75:214-242.
- Bhatt DC, Mitaliya KD, Mehta SK and Joshi PN (2001) Note on some ethnomedicinal plants of Panchham Hills of Kachchh district, Gujarat. *Eth. Jou.* Vol.14:34-35.
- Birhana Z, Endale A and Shewamene Z (2015) an ethnomedicinal investigation of plants used by traditional healers of Gondar town, north western Ethiopia. *Journal of medicinal plants studies*, Vol. 3(2): 36-43.
- D'Cruz L (2002) Phytochemical and Biochemical Studies of some Ethnomedicinal Plants of Dediapada Forests, Gujarat, India, PhD Thesis, Gujarat University, Ahmedabad.
- Gamit SB, Maurya RR, Qureshimatva UM, Solanki HA (2015) Check list of flowering plants in Tapi District, Gujarat, India. *International Journal of Advanced Research* 3: 1104-1123.
- Harshberger JW (1896) The purpose of ethnobotany. *Bot. Gaz.*, Vol.21:146-158.
- Jain SK (2002) Bibliography of Indian Ethnobotany. *Scientific Publications, Jodhpur, India*.
- Joshi EB, Jain BK, Joshi PN and Soni HB (2013) Prevalence of Traditional Medication through Native Floral Elements among Tribal Communities of Kachchh Arid Ecosystem, Gujarat, India. *International Journal of Environment*, Vol.2:184-2001.
- Joshi MC, Patel MB and Mehta PJ (1980) some folk medicines of Dangs, Gujarat State. *Bull. Med. Ethnobot. Res.* Vol.1: 8-24.
- Kathiriya SV, Durgga V and Vyas HU (2012) Ethno-veterinary practices associated with animal healthcare in dang district of south gujarat, India. Vol. 3: 92-95.

- Navaroja RD and Kanchana M (2012) Observations of medicinal plants used by kukna tribes of jhavada villages of Waghai forest, Dangs DT, Gujarat, India. *International Journal of Applied Biology and Pharmaceutical Technology*; Vol.3: 414-417.
- Nirmal Kumar JI, Kumar RN and Hiren Kumar BS (2000) Preliminary investigations of plant diversity of Khatana and Waghai forests of North Western Ghats, South Gujarat, India. *Int. J. Ecol. Envi. Cons.*, Vol.6 (1):87-92.
- Nirmal Kumar JI, Soni H, Patil N and Kumar RN (2004) Ethanobotanical values of certain plant species of Dangs forest, extreme northern parts of Western Ghats, South Gujarat, India, *J. Curr. Biosci.*, Vol.2 (1):63-74.
- Qureshimatva UM, Maurya RR, Gamit SB and Solanki HA (2016) Check List of Flowering Plants in Panchmahal District, Gujarat, India. *Forest Research*, 5 (3): 1000176.
- Santapau H (1954) Contribution to the Botany of Dangs forest in Gujarat. *Guj. Res. Soc.* Vol.16:204-320 and Vol.17:1-59.
- Shah GL (1978) Flora of Gujarat State. Vol. I & II. Sardar Patel University Press, Vallabh Vidyanagar.
- Tapsell LC, Hemphill I and Cobiac L (2006) Health benefits of herbs and species: the past, the present, the future. *Medical Journal of Australia*, Vol.185:4-24.

Table.1 List of Bhagats interviewed:

Sr.No.	Name	Age	Practice period	Experience
1.	Mangubhai Bhoye	65	3 years	45 years
2.	Gangabhai Bhoye	45	5 years	30 years
3.	Sukerbhai Pawar	70	3 years	25 years
4.	Ramabhai Chaudhri	53	2 years	12 years
5.	ChunilalBhai Chaudhri	58	6 years	20 years
6.	Lashubhai Pawar	55	6 years	20 years
7.	Soniyabhai Kokni	67	2 years	30 years
8.	Rajeshbhai Kokni	46	1 years	10 years
9.	Singubhai Gamit	60	5 years	37 years
10.	Sohaliyabhai Khurkhutiya	59	5 years	23 years

Table.2 The Reported Use Value (per plant part) RU plant part:

No.	Scientific Name	Part Used
1	<i>Acacia senegal</i> (L.) Willd.	Bark
2	<i>Ailanthus excelsa</i> Roxb.	Bark
3	<i>Albizia odoratissima</i> (L.f.) Benth.	Bark
4	<i>Antidesma ghaesembilla</i> Gaertn.	Bark
5	<i>Azadirachta indica</i> A.Juss.	Bark
6	<i>Bauhinia racemosa</i> Lam.	Bark
7	<i>Bridelia squamosa</i> (Lam.) Gehrm.	Bark
8	<i>Endosamara racemosa</i> (Roxb.) R.Geesink.	Bark
9	<i>Erythrina suberosa</i> Roxb.	Bark
10	<i>Eucalyptus globulus</i> Labill.	Bark
11	<i>Garuga pinnata</i> Roxb.	Bark
12	<i>Grewia tiliifolia</i> Vahl.	Bark
13	<i>Lannea coromandelica</i> (Houtt.) Merr.	Bark
14	<i>Mitragyna parvifolia</i> (Roxb.) Korth.	Bark
15	<i>Ougeinia oojeinensis</i> (Roxb.) Hochreut.	Bark
16	<i>Oroxylum indicum</i> (L.) Kurz.	Bark
17	<i>Pterocarpus marsupium</i> Roxb.	Bark
18	<i>Sphaeranthus indicus</i> L.	Bark
19	<i>Syzygium cumini</i> (L.) Skeels.	Bark
20	<i>Terminalia arjuna</i> (Roxb.) W. & A.	Bark
21	<i>Terminalia crenulata</i> Roth.	Bark
22	<i>Holarrhena pubescens</i> Wall. ex G.Don.	Bark
23	<i>Dioscorea bulbifera</i> L.	Bulb
24	<i>Dioscoria hispida</i> Dennt. Sch. Hort. Malab.	Bulb
25	<i>Zingiber cernuum</i> Dalzell.	Tubers
26	<i>Sida cordata</i> (Burm.f.) Borss.Waalk.	Dry stick
27	<i>Sida cordifolia</i> L.	Dry stick
28	<i>Acmella oleracea</i> (L.) R.K.Jansen.	Flowers
29	<i>Butea monosperma</i> (Lam.) Taub.	Flowers
30	<i>Carissa carandas</i> L.	Flowers
31	<i>Jasminum multiflorum</i> (Burm.f.) Andr.	Flowers
32	<i>Woodfordia fruticosa</i> (L.) Kurz.	Flowers
33	<i>Myristica fragrans</i> Houtt.	Fruits
34	<i>Phyllanthus emblica</i> L.	Fruits
35	<i>Caesalpinia bonduc</i> (L.) Roxb.	Fruits
36	<i>Carica papaya</i> L.	Fruits
37	<i>Cassia fistula</i> L.	Fruits
38	<i>Celastrus paniculatus</i> Wild.	Fruits
39	<i>Moringa oleifera</i> Lam.	Fruits
40	<i>Piper longum</i> L.	Fruits

41	<i>Putranjiva roxburghii</i> Wall.	Fruits
42	<i>Solanum violaceum</i> Ortega.	Fruits
43	<i>Strychnos nux-vomica</i> L.	Fruits
44	<i>Terminalia bellirica</i> (Gaertn) Roxb.	Fruits
45	<i>Terminalia chebula</i> Retz.	Fruits
46	<i>Ficus benghalensis</i> L.	Roots
47	<i>Citrus limon</i> (L.) Osbeck.	Fruits
48	<i>Calotropis gigantea</i> (L.) R. Br.	Latex
49	<i>Abrus precatorius</i> L.	Leaves
50	<i>Adhatoda vasica</i> (L.) Nees.	Leaves
51	<i>Albizia procera</i> (Roxb.) Benth.	Leaves
52	<i>Andrographis paniculata</i> (Burm.f.) Nees.	Leaves
53	<i>Annona squamosa</i> L.	Leaves
54	<i>Bacopa monnieri</i> (L.) Pennell.	Leaves
55	<i>Barleria cristata</i> L.	Leaves
56	<i>Bauhinia vahlii</i> Wight & Arn.	Leaves
57	<i>Bryophyllum pinnatum</i> (Lam.) Oken	Leaves
58	<i>Buchanania cochinchinensis</i> (Lour.) M.R.Almeida.	Leaves
59	<i>Catharanthus rosea</i> (L.) G. Don.	Leaves
60	<i>Clematis gouriana</i> Roxb.	Leaves
61	<i>Cymbopogon citratus</i> (DC.) Stapf.	Leaves
62	<i>Dregea volubilis</i> (L.f.) Benth. ex Hook.f.	Leaves
63	<i>Gymnema sylvestre</i> (Retz.) R.Br. ex Sm.	Leaves
64	<i>Indigofera heterantha</i> Brandis.	Leaves
65	<i>Mentha spicata</i> L.	Leaves
66	<i>Mimosa pudica</i> L.	Leaves
67	<i>Ocimum americanum</i> L.	Leaves
68	<i>Ocimum basilicum</i> L.	Leaves
69	<i>Ocimum basilicum</i> L.	Leaves
70	<i>Ocimum gratissimum</i> L.	Leaves
71	<i>Ocimum tenuiflorum</i> L.	Leaves
72	<i>Saraca asoca</i> (Roxb.) Willd.	Leaves
73	<i>Senna tora</i> (L.) Roxb.	Leaves
74	<i>Tylophora indica</i> (Burm. f.) Merr.	Leaves
75	<i>Vitex negundo</i> L.	Leaves
76	<i>Datura metel</i> L.	Leaves
77	<i>Blumea eriantha</i> DC.	Leaves
78	<i>Tridax procumbens</i> (L.) L.	Leaves
79	<i>Artocarpus heterophyllus</i> Lam.	Fruits
80	<i>Colocasia gigantea</i> (Blume) Hook.f.	Petiole
81	<i>Helicteres isora</i> L.	Pod
82	<i>Desmodium grandiflorum</i> DC.	Roots

83	<i>Abelmoschus manihot</i> (L.) Medik.	Roots
84	<i>Acanthospermum hispidum</i> DC.	Roots
85	<i>Asparagus racemosus</i> Willd.	Roots
86	<i>Bambusa bambos</i> (L.) Voss.	Roots
87	<i>Biophytum sensitivum</i> (L.) DC.	Roots
88	<i>Chlorophytum tuberosum</i> (Roxb.) Baker.	Roots
89	<i>Clerodendrum phlomidis</i> L.f.	Roots
90	<i>Clitoria ternatea</i> L.	Roots
91	<i>Curculigo orchioides</i> Gaertn.	Roots
92	<i>Desmodium gangeticum</i> (L.) DC.	Roots
93	<i>Hygrophila auriculata</i> (Schumach.) Heine.	Roots
94	<i>Plumbago zeylanica</i> L.	Roots
95	<i>Rauvolfia serpentina</i> (L.) Benth. ex Kurz.	Roots
96	<i>Ricinus communis</i> L.	Roots
97	<i>Saccharum spontaneum</i> L.	Roots
98	<i>Senna alata</i> (L.) Roxb.	Roots
99	<i>Tabernaemontana divaricata</i> (L.) R.Br. ex Roem. & Schult.	Roots
100	<i>Withania somnifera</i> (L.) Dunal.	Roots
101	<i>Flueggea virosa</i> (Roxb. ex Willd.) Royle.	Roots
102	<i>Musa</i> × <i>paradisiaca</i> L.	Sap
103	<i>Anacardium occidentale</i> L.	Seeds
104	<i>Tamarindus indica</i> L.	Seeds
105	<i>Tectona grandis</i> L.f.	Seeds
106	<i>Urena lobata</i> L.	Seeds
107	<i>Amorphophallus paeoniifolius</i> (Dennst.) Nicolson.	Tuber
108	<i>Derris scandens</i> (Roxb.) Benth.	Tuber
109	<i>Cocculus hirsutus</i> (L.) W.Theob.	Whole plant
110	<i>Euphorbia hirta</i> L.	Whole plant
111	<i>Hemidesmus indicus</i> (L.) R. Br. ex Schult.	Whole plant
112	<i>Aloe vera</i> (L.) Burm.f.	Whole plant
113	<i>Cyanthillium cinereum</i> (L.) H.Rob.	Whole plant
114	<i>Cymbopogon martini</i> (Roxb.) W.Watson.	Whole plant
115	<i>Eclipta prostrata</i> (L.) L.	Whole plant
116	<i>Hiptage benghalensis</i> (L.) Kurz.	Whole Plant
117	<i>Rivea hypocrateriformis</i> Choisy.	Whole plant
118	<i>Tinospora sinensis</i> (Lour.) Merr.	Whole plant
119	<i>Santalum album</i> L.	Whole plant
120	<i>Neuracanthus sphaerostachys</i> Dalzell.	Whole plant

Table No. 3: List of medicinal plants which are used by local tribals of Waghai Forest, Dang, Gujarat.

No.	Local Name	Scientific Name	Family	Part Used	Disease	Preparation and Usage
1	Chokhi Bhindi	<i>Abelmoschus manihot</i> (L.) Medik.	Malvaceae	Roots	Gynecological problem	Root powdered which is then committed to drink by combining with water
2	Chanoti	<i>Abrus precatorius</i> L.	Fabaceae	Leaves	Boils in the mouth	Fresh leaves are chewed
3	Ghubita	<i>Acacia senegal</i> (L.) Willd.	Leguminosae	Bark	T.B and Cough	Bark is boiled and juice is drunk every day
4	Gokhru	<i>Acanthospermum hispidum</i> DC.	Compositae	Roots	Toothache	Dry roots are chewed every morning and evening
5	Aakalkhada	<i>Acmella oleracea</i> (L.) R. K. Jansen.	Asteraceae	Flowers	Brain tonic	Flowers mixed with milk and taken every morning
6	Arduso	<i>Adhatoda vasica</i> (L.) Nees	Acanthaceae	Leaves	Asthma	Smoke is inhaled twice a day
7	BhuthJhad	<i>Ailanthus excelsa</i> Roxb.	Simaroubaceae	Bark	Gastric problem	Bark is ground and prevented in water for the whole night and then drunk.
8	Dhorsiris	<i>Albizia odoratissima</i> (L.f.) Benth.	Leguminosae	Bark	Gestation is not considered	Bark is ground and kept in water for the whole night and then drunk every morning
9	Kilai	<i>Albizia procera</i> (Roxb.) Benth.	Leguminosae	Leaves	Scorpion bite	Leaves are crushed and applied to the place
10	Aloe vera	<i>Aloe Vera</i> (L.) Burm. f.	Xanthorrhoeaceae	Whole plant	Skin disease	The paste is applied to the place of infection
11	Jangli suran	<i>Amorphophallus paeoniifolius</i> (Dennst.) Nicolson.	Araceae	Tuber	Dysentery	Tubers are boiled and given to eat

No.	Local Name	Scientific Name	Family	Part Used	Disease	Preparation and Usage
12	Kaju	<i>Anacardium occidentale</i> L.	Anacardiaceae	Seeds	Chicken guinea	New seeds are consumed every day
13	Kariyatu	<i>Andrographis paniculata</i> (Burm.f.) Nees.	Acanthaceae	Leaves	Fever (Safed pani Pagar)	Leaves are boiled along with milk and given to drink twice a daytime
14	Sitafal	<i>Annona squamosa</i> L.	Annonaceae	Leaves	Cancer	Juice of leaves is applied three times a day
15	Ragat roido	<i>Antidesma ghaesembilla</i> Gaertn.	Phyllanthaceae	Bark	Blood clot	Paste from the bark is prepared along with ash and applied to the place of damage
16	Fanas	<i>Artocarpus heterophyllus</i> Lam.	Moraceae	Fruits	Chicken pox	New fruits are broken down and applied to the body where it is tainted
17	Satavari	<i>Asparagus racemosus</i> Willd.	Asparagaceae	Roots	Jaundice	Roots are boiled and eaten and a 'male' of roots is tied At neck
18	Limbdo	<i>Azadirachta indica</i> A. Juss.	Meliaceae	Bark	Gastric problem	Bark is crushed and mixed with water and drunk
19	Brahmi	<i>Bacopa monnieri</i> (L.) Pennell.	Plantaginaceae	Leaves	Brain tonic	The leaves are eaten every day
20	Moti Jaal	<i>Bambusa bambos</i> (L.) Voss.	Graminae	Roots	Cattle disease	Roots are crushed and applied to the place of infection
21	Katasirio	<i>Barleria cristata</i> L.	Acanthaceae	Leaves	Cough	Juice of leaves is given to drink
22	Kanchan	<i>Bauhinia racemosa</i> Lam.	Leguminosae	Bark	Cancer	Paste of bark is utilized to the lesion

No.	Local Name	Scientific Name	Family	Part Used	Disease	Preparation and Usage
23	Aasitro	<i>Bauhinia vahlii</i> Wight & Arn.	Leguminosae	Leaves	Swelling	Juice of leaves is applied to the place of injury
24	Desi lajagre	<i>Biophytum sensitivum</i> (L.) DC.	Oxalidaceae	Roots	Toothache	Roots are chewed every morning and eve
25	Burandu	<i>Blumea eriantha</i> DC.	Compositae	Leaves	Stop bleeding	The leaves are crushed and kept near the place of injury
26	Aasan	<i>Bridelia squamosa</i> (Lam.) Gehrm.	Euphorbiaceae	Bark	Stomach problem	Fresh bark is broken down and mixed in water and then drunk
27	Pan futi	<i>Bryophyllum pinnatum</i> (Lam.) Oken	Crassulaceae	Leaves	Kidney stone	Dried leaves are pulverized and mixed with water and drunk every day
28	Charoli	<i>Buchanania cochinchinensis</i> (Lour.) M.R.Almeida.	Anacardiaceae	Leaves	Skin disease	The leaves are crushed and applied to the skin
29	Polas	<i>Butea monosperma</i> (Lam.) Taub.	Leguminosae	Flowers	Cooling agent	Dry flowers are mixed in water for 2-3 hours and a bath are taken for cooling.
30	Kachko	<i>Caesalpinia bonduc</i> (L.) Roxb.	Caesalpiniaceae	Fruits	Stomach problem (Karam)	Small quantity of fruit is mixed in milk; after boiling it is drunk
31	Aakdo	<i>Calotropis gigantea</i> (L.) R. Br.	Asclepidiaceae	Latex	'Hathi pago'	A specific quantity of latex is added to milk and given to drink once a week
32	Pappya	<i>Carica papaya</i> L.	Caricaceae	Fruits	Gynecological problem	Fresh fruits are eaten every morning till the problem is solved
33	Kirambda	<i>Carissa carandas</i> L.	Apocynaceae	Flowers	Body pain	Flowers are crushed mixing in hair oil and applied for

No.	Local Name	Scientific Name	Family	Part Used	Disease	Preparation and Usage
						massage
34	Bahava	<i>Cassia fistula</i> L.	Caesalpiniaceae	Fruits	Constipation	The yellow part of fruit are mixed with jaggery and given to eat
35	Barmasi	<i>Catharanthus rosea</i> (L.) G. Don.	Apocynaceae	Leaves	Diabetes	Powder of dry leaves is mixed in 3 other materials and given to drink every day
36	Mal kangni	<i>Celastrus paniculatus</i> Wild.	Celastraceae	Fruits	Body pain	Fruit is crushed and mixed with oil to use as massage oil
37	Safed musli	<i>Chlorophytum tuberosum</i> (Roxb.) Baker.	Asparagaceae	Roots	Increase masculinity	Powder of roots is given to drink every day
38	Nimbu	<i>Citrus limon</i> (L.) Osbeck.	Rutaceae	Fruits	Digestion problems	Juice of fruit is mixed in water, adding a pinch of salt and a spoon of sugar given to drink
39	Morvel	<i>Clematis gouriana</i> Roxb.	Ranunculaceae	Leaves	Skin disease	The leaves are crushed and applied to the skin
40	Aarni	<i>Clerodendrum phlomidis</i> L.f.	Lamiaceae	Roots	An eye problem	The paste is applied to the place of infection
41	Gokarni	<i>Clitoria ternatea</i> L.	Leguminosae	Roots	Diarrhea	Powder of roots is mixed in water and given to drink
42	Taan	<i>Cocculus hirsutus</i> (L.) W. Theob.	Menispermaceae	Whole Plant	Green diarrhea in children	The climber is tied to the hand 4-5 times until it gets dry.
43	Hathi pan	<i>Colocasia gigantea</i> (Blume) Hook. f.	Araceae	Petiole	Hair fall	Petiole crushed mixed in oil and applied every day
44	Khajuriya	<i>Curculigo orchoides</i> Gaertn.	Liliaceae	Roots	Human power	Root powder is made to drink

No.	Local Name	Scientific Name	Family	Part Used	Disease	Preparation and Usage
45	Shahdevi	<i>Cyanthillium cinereum</i> (L.) H. Rob.	Compositae	Whole plant	Cuts and injuries	Paste made from the whole plant is used
46	Lili cha	<i>Cymbopogon citratus</i> (DC.) Stapf.	Graminae	Leaves	Cough	Tea is prepared by boiling the leaves and drunk
47	Rosa ghas	<i>Cymbopogon martini</i> (Roxb.) W. Watson.	Graminae	Whole plant	Body pain	The powder is drawn and mixed with oil and applied as a massage oil
48	Kala Dhaturu	<i>Datura metel</i> L.	Solanaceae	Leaves	Asthma	Leaves are smoked twice a day
49	Aalae Karen	<i>Derris scandens</i> (Roxb.) Benth.	Papilionaceae	Tuberous roots	Jaundice	Tubers are boiled and given to deplete
50	Salparni	<i>Desmodium gangeticum</i> (L.) DC.	Leguminosae	Roots	Inner damage of body/ (Gupt mar)	Paste is applied to the place of damage
51	Lombia aasud	<i>Desmodium grandiflorum</i> DC.	Leguminosae	Roots	Urinary problem	The powder is mixed in water and given to drink
52	Kadvo kand	<i>Dioscorea bulbifera</i> L.	Dioscoriaceae	Bulb	Diarrhea	Bulbs are freed and given to eat
53	Vaajkand	<i>Dioscoria hispida</i> Dennt. Sch. Hort. Malab.	Dioscoriaceae	Bulb	Energizer	Bulbs are freed and given to eat
54	Gokvel	<i>Dregea volubilis</i> (L.f.) Benth. ex Hook.f.	Apocynaceae	Leaves	Boils and abscesses	The leaves are crushed and applied to the place of infection
55	Bhrungraj	<i>Eclipta prostrata</i> (L.) L.	Asteraceae	Whole plant	Jaundice	Juice extracted from the whole plant is good for curing jaundice
56	Vela bivla	<i>Endosamara racemosa</i> (Roxb.) R. Geesink.	Leguminosae	Bark	Kidney stone	Bark is crushed and kept in water for a full night and

No.	Local Name	Scientific Name	Family	Part Used	Disease	Preparation and Usage
						morning water is drunk every day
57	Pangara	<i>Erythrina suberosa</i> Roxb.	Leguminosae	Bark	Wounds	The paste of the bark is applied to the place of infection
58	Nilgiri	<i>Eucalyptus globulus</i> Labill.	Myrtaceae	Bark	Gastric problem	Bark Powder is mixed in water and given to drink
59	Dadri	<i>Euphorbia hirta</i> L.	Euphorbiaceae	Whole plant	Skin diseases	The whole plant is applied to the seat of infection by suppressing
60	Vaad	<i>Ficus benghalensis</i> L.	Urticaceae	Hangin g roots	Toothache	Chew the roots daily
61	Pichrund	<i>Flueggea virosa</i> (Roxb. ex Willd.) Royle.	Phyllanthaceae	Roots	Constipation	Roots are chewed every morning and evening and juice is to be drunk.
62	Kakod	<i>Garuga pinnata</i> Roxb.	Burseraceae	Bark	Wound in stomach	Bark is crushed and kept in water for a full night and in the morning water is drunk every day
63	Dhaman	<i>Grewia tiliifolia</i> Vahl.	Malvaceae	Bark	Eye problem	Juice from fresh bark is extracted and a small drop is put in eye
64	Madunasni	<i>Gymnema sylvestre</i> (Retz.) R.Br. ex Sm.	Apocynaceae	Leaves	Kidney stone	Powder of leaves is mixed with the powder of Panfuti and given to drink
65	Aati/Marda sing	<i>Helicteres isora</i> Linn.	Sterculiaceae	Pod	Constipation	The powder of pods is prepared and give to drink

No.	Local Name	Scientific Name	Family	Part Used	Disease	Preparation and Usage
66	Upersadi	<i>Hemidesmus indicus</i> (L.) R. Br. ex Schult.	Apocynaceae	Whole plant	Women milk problem	The ingredients of whole plants are mixed in milk and given to drink
67	Fagulta	<i>Hiptage benghalensis</i> (L.) Kurz.	Malpighiaceae	Whole Plant	Joint pain	Folios and other components are burned a steam bath is moved over.
68	Kudi	<i>Holarrhena pubescens</i> Wall. ex G.Don.	Apocynaceae	Bark	Wounds	Bark paste is applied to the place of infection
69	Galosta	<i>Hygrophila auriculata</i> (Schumach.) Heine.	Acanthaceae	Roots	Gestation is not considered	Powder of the roots is given to drink by mixing with water
70	Supli	<i>Indigofera heterantha</i> Brandis.	Fabaceae	Leaves	Child fever	Leaves are boiled in water and is given a bath
71	Chameli	<i>Jasminum multiflorum</i> (Burm.f.) Andr.	Oleaceae	Flowers	Urinary problems (Safed pani)	Flowers are boiled in milk and given to drink
72	Madul	<i>Lannea coromandelica</i> (Houtt.) Merr.	Anacardiaceae	Bark	Wound in stomach	Bark is crushed and kept in water for a full night and in the morning water is drunk every day
73	Pudina	<i>Mentha spicata</i> L.	Lamiaceae (Labiatae)	Leaves	Acidity	Leaves are given to eat
74	Lagamni	<i>Mimosa pudica</i> L.	Leguminosae	Leaves	Swelling	Paste of leaves is used about the swelling place
75	Kalam	<i>Mitragyna parvifolia</i> (Roxb.) Korth.	Rubiaceae	Bark	Stomach pain	The powder is mixed in water and given to drink
76	Segul	<i>Moringa oleifera</i> Lam.	Moringaceae	Fruits	Kidney stone	Fruit powder is mixed with 2 other materials and given to

No.	Local Name	Scientific Name	Family	Part Used	Disease	Preparation and Usage
						drink
77	Keli	<i>Musa × paradisiaca</i> L.	Musaceae	Sap	Snake bite	Sap is used as soon as the snake bites so that poison is contained
78	Jayfaal	<i>Myristica fragrans</i> Houtt.	Myristicaceae	Fruits	Leprosy	Dry fruits are fed to eat along with jaggery
79	Punjae	<i>Neuracanthus sphaerostachys</i> Dalzell.	Acanthaceae	Whole plant	Diarrhea	A powder made from the plant is given to drink
80	Ramtulsi	<i>Ocimum americanum</i> L.	Lamiaceae	Leaves	Cough	Fresh leaves are fed three times every day
81	Dumro	<i>Ocimum basilicum</i> L.	Lamiaceae	Leaves	Scorpion bite	The leaves are crushed and applied to the place where scorpion has stung
82	Safed tulsi	<i>Ocimum basilicum</i> L.	Lamiaceae	Leaves	Headache	The leaves are heated and kept on the head. This is iterated for 10-20 minutes
83	Lal tulsi	<i>Ocimum gratissimum</i> L.	Lamiaceae	Leaves	Headache	The leaves are heated and kept on the head. This is iterated for 10-20 minutes
84	Tulsi	<i>Ocimum tenuiflorum</i> L.	Lamiaceae	Leaves	Cough and Cold	Fresh leaves are fed three times every day
85	Tivis	<i>Oogenia oogenensis</i>	Fabaceae	Bark	Swelling	Paste made from the bark is applied
86	Tetuu	<i>Oroxylum indicum</i> (L.) Kurz.	Bignoniaceae	Bark	Jaundice	Bark is boiled and then paid to drink every night
87	Aambla	<i>Phyllanthus emblica</i> L.	Euphorbiaceae	Fruits	Digestion problems	Dry fruits are mixed in water and given to drink.

No.	Local Name	Scientific Name	Family	Part Used	Disease	Preparation and Usage
88	Lendi Pipal	<i>Piper longum</i> L.	Piperaceae	Fruits	Cough	Powder of fruit is mixed with panfuti dry leaves and given to drink.
89	Chitrak	<i>Plumbago zeylanica</i> L.	Plumbaginaceae	Roots	Skin disease	Roots are crushed and then boiled and given to drink as black tea
90	Bivla/bioo	<i>Pterocarpus marsupium</i> Roxb.	Fabaceae	Bark	Jaundice	Bark is boiled and then paid to drink every night
91	Putrangjivi	<i>Putranjiva roxburghii</i> Wall.	Euphorbiaceae	Fruits	Birth related problems	12 fruits are tied with thread and put on neck of lady who is not conceiving a child.
92	Sarpgandha	<i>Rauvolfia serpentina</i> (L.) Benth. ex Kurz.	Apocynaceae	Roots	High Blood Pressure	Root powder is mixed with khatibhindi to drink
93	Divela	<i>Ricinus communis</i> L.	Euphorbiaceae	Roots	Urinary problems	Roots are boiled and drunk as tea
94	Fangvel	<i>Rivea hypocrateriformis</i> Choisy.	Convolvulaceae	Whole plant	Anthelmintic	The plant is boiled and water is given as a drink
95	Dabadiya	<i>Saccharum spontaneum</i> L.	Poaceae	Roots	Cattle disease	Paste of roots is applied in the place of infection
96	Chandan	<i>Santalum album</i> L.	Santalaceae	Whole plant	Headache	Paste filler is liberally applied
97	Sita ashok	<i>Saraca asoca</i> (Roxb.) Willd.	Leguminosae	Leaves	Energizer	Leaves are boiled and given to drink
98	Kasundri	<i>Senna alata</i> (L.) Roxb.	Leguminosae	Roots	Diarrhea	Roots are given to chew
99	Taruta	<i>Senna tora</i> (L.) Roxb.	Leguminosae	Leaves	Scorpion bite	The leaves are crushed and

No.	Local Name	Scientific Name	Family	Part Used	Disease	Preparation and Usage
						applied
100	Chiknae	<i>Sida cordata</i> (Burm.f.) Borss.Waalk.	Malvaceae	Dry stick	Given to Pregnant lady	Dry stick is kept in hair during birth
101	Bala	<i>Sida cordifolia</i> L.	Malvaceae	Dry stick	Headache	Small dry stick is attached to the auricle
102	Ubhi ringni	<i>Solanum violaceum</i> Ortega.	Solanaceae	Fruits	Toothache	Pinch of fruit powder is added in a glass of milk and then kept in mouth for a while
103	Gokharmundi	<i>Sphaeranthus indicus</i> L.	Compositae	Bark	Swelling of neck	Bark is boiled and then paid to drink every night
104	Jher kochla	<i>Strychnos nux-vomica</i> L.	Loganiaceae	Fruits	Energizer	Fruits are given with specific quantity to eat
105	Mota Jambda	<i>Syzygium cumini</i> (L.) Skeels.	Myrtaceae	Bark	Stomach pain	Bark powder is made to drink
106	Tagri	<i>Tabernaemontana divaricata</i> (L.) R.Br. ex Roem. & Schult.	Apocynaceae	Roots	Toothache	Rots are chewed and water is kept in the mouth for some time
107	Khati amla	<i>Tamarindus indica</i> L.	Leguminosae	Seeds	Scorpion bite	The seed coat is removed and rubbed and then applied
108	Saag	<i>Tectona grandis</i> L.f.	Lamiaceae	Seeds	Kidney stone	Seed powder is given to drink
109	Arjun Sadad	<i>Terminalia arjuna</i> (Roxb.) W. & A.	Combretaceae	Bark	Heart problems	Bark is boiled and then paid to drink every night
110	Behda	<i>Terminalia bellirica</i> (Gaertn) Roxb.	Combretaceae	Fruits	Acidity	Fruits are powdered and given to drink

No.	Local Name	Scientific Name	Family	Part Used	Disease	Preparation and Usage
111	Hardae	<i>Terminalia chebula</i> Retz.	Combretaceae	Fruits	Toothache	The paste is applied to the swollen part
112	Saaddo	<i>Terminalia crenulata</i> Roth.	Combretaceae	Bark	Joints pain	Bark is boiled and then paid to drink every night
113	Galo	<i>Tinospora sinensis</i> (Lour.) Merr.	Menispermaceae	Whole plant	Fever	The whole plant is dried and crushed and kept in water and juice is drunk.
114	Kuradiyu	<i>Tridax procumbens</i> (L.) L.	Asteraceae (Compositae)	Leaves	Cuts/bleeding	The leaves are crushed. Juice is applied to the place to cut and the leaves are placed and tied
115	Damvel	<i>Tylophora indica</i> (Burm. f.) Merr.	Apocynaceae	Leaves	Asthma	Leaves are smoked when a breathing problem occurs
116	Ranbhindi	<i>Urena lobata</i> L.	Malvaceae	Seeds	Heart problems	Seeds are powdered and given to drink
117	Nirgud	<i>Vitex negundo</i> L.	Lamiaceae	Leaves	Body pain	Powder of leaves is mixed in oil and used as massage oil
118	Ashwagandha	<i>Withania somnifera</i> (L.) Dunal.	Solanaceae	Roots	Remove fat	Root powder is given to drink every night
119	Dowari	<i>Woodfordia fruticosa</i> (L.) Kurz.	Lythraceae	Flowers	Diarrhea	Dry flowers are boiled and drunk as tea
120	Aadu	<i>Zingiber cernuum</i> Dalzell.	Zingiberaceae	Tubers	Cough and Cold	Fresh tubers is used up